CLAIMS

We Claim:

1. An extensible schema stored as computer-executable instructions in a computer readable medium for defining a respective visual appearance for a plurality of computer system components in accordance with a user interface skin theme, the schema comprising:

a system schema file for specifying allowable form and content of data that defines at least one display attribute for at least one user interface component, the system schema file including at least one definition of a plurality of user interface parts, and

the system schema file including a definition of a plurality of user interface part states corresponding to at least a respective one of the user interface parts.

2. The schema of claim 1 wherein the system schema file further comprises a definition of a common set of enumerations for shared use by a plurality of modules that cooperate to display the graphical user interface in accordance with the skin theme.

3. The schema of claim 2 wherein the system schema file includes a common set of properties defined based at least in part on at least one of the common enumerations.

4. The schema of claim 3 wherein strings and enumeration values for a plurality of the properties are defined in a single table using a two-pass include technique.

5. The schema of claim of claim 1 wherein at least one of the plurality of modules is selected from the group consisting of: a theme manager, a theme-authoring file, and at least one theme-aware control.

6. The schema of claim 5 wherein:

at least one of the at least one theme-aware control is a custom theme-aware control that specifies allowable form and content of data in a custom schema file;

the custom schema file including at least one definition of a plurality of custom user interface parts; and

the custom schema file including a definition of a plurality of user interface part states corresponding to at least a respective one of the custom user interface parts.

7. The schema of claim 6 wherein the custom schema file is compiled into a dynamic link library of the custom theme-aware control.

8. The schema of claim 7 wherein the dynamic link library of the custom theme-aware control is registered as a path value in a registry key.

9. The schema of claim 8 further comprising a theme packager for attempting to call at least one dynamic link library to retrieve corresponding custom schema information.

10. The schema of claim 9 wherein the theme packager automatically attempts to call a plurality of dynamic link libraries to retrieve respective custom theme schema information based upon a format of at least one of the system schema file and the custom schema file.

11. The schema of claim 10 further comprising a theme loader for loading registered control dynamic link libraries when a packaged theme file is loaded into memory of the computer.

12. A method of using at least one schema file for theming the appearance of a computer operating system user interface, the method comprising the steps of:

defining system skin theme metadata in a system schema file;

describing at least one system theme in accordance with the system skin theme metadata;

generating a packaged theme file based at least in part upon the at least one system theme; and

loading the packaged theme file into memory of the computer.

13. The method of claim 12 further comprising the steps of:

defining custom skin theme metadata in a custom schema file;

describing at least one custom theme in accordance with the custom skin theme metadata; and

generating the packaged theme file based at least in part upon the at least one custom theme.

14. The method of claim 13 further comprising the step of: verifying that the at least one system theme complies with the system skin theme metadata.

15. The method of claim 14 further comprising the step of: verifying that the at least one custom theme complies with the custom skin theme metadata.

16. A computer-readable storage medium storing thereon computer-executable instructions for performing the method of claim 12.

17. A computer-readable storage medium storing thereon computer-executable instructions for performing the method of claim 13.

18. A computer system comprising computer-readable instructions stored on a computer storage medium, such computer-readable instructions defining an extensible schema for defining a respective visual appearance for a plurality of computer system components in accordance with a user interface skin theme, the schema comprising

a system schema file for specifying allowable form and content of data that defines at least one display attribute for at least one user interface component, the system schema file including at least one definition of a plurality of user interface parts and a definition of a plurality of user interface part states corresponding to at least a respective one of the user interface parts.